PlasmaSync Plasma Monitor

PlasmaSync™ 42XM3
PX-42XM3A

Model Information

For the operation of your plasma monitor,
refer to "Operation Manual".

NEC

Important Information

Warning

Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/ Data Processing Equipment ANSI/NFPA 75.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE:

When you connect a computer to this monitor, use an RGB cable including the ferrite core on both ends of the cable. And regarding DVI and power cable, attach the supplied ferrite cores. If you do not do this, this monitor will not conform to mandatory FCC standards.
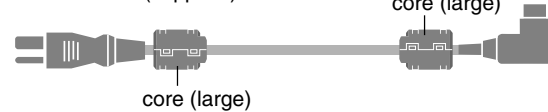
Attaching the ferrite cores:

Set the ferrite cores on both ends of the DVI cable (not supplied), and both ends of the power cable (supplied). Close the lid tightly until the clamps click.

Use the band to fasten the ferrite core (supplied) to the DVI cable.

DVI cable (not supplied)

band   band   Connector

core (small)   core (small)

Power cable (supplied)

core (large)

core (large)

Recommandations importantes

Avertissement

Ne pas utiliser dans une salle d'ordinateurs telle que définie dans la Norme pour la protection des ordinateurs électroniques/appareils de traitement des données ANSI/NFPA75.

DOC avis de conformation

Cet appareil numérigue de la Classe A respecte toutes les exigences du Réglement sur le Matériel Brouilleur du Canada.
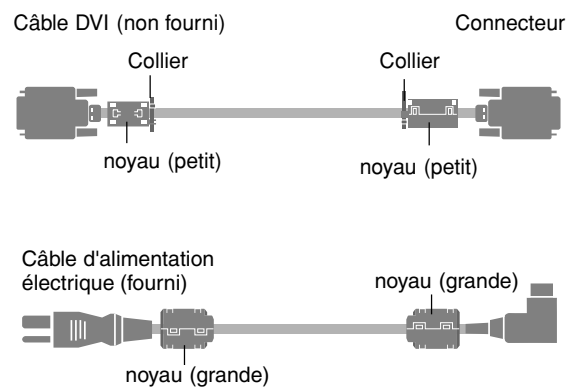

REMARQUE:

Pour raccorder un ordinateur à ce moniteur, procéder à l'aide d'un câble RGB à âme de ferrite aux deux extrémités. Sur les câbles DVI et les câbles d'alimentation électrique, fixer les âmes de ferrite fournies aux extrémités. Si vous ne le faîtes, le moniteur ne sera pas en conformité avec les exigences des standards FCC.

Fixation des noyaux en ferrite.

Monter les tores en ferrite aux deux extrêmités du câble DVI (non fourni) et aux deux extrêmités du câble d'alimentation électrique (fourni).

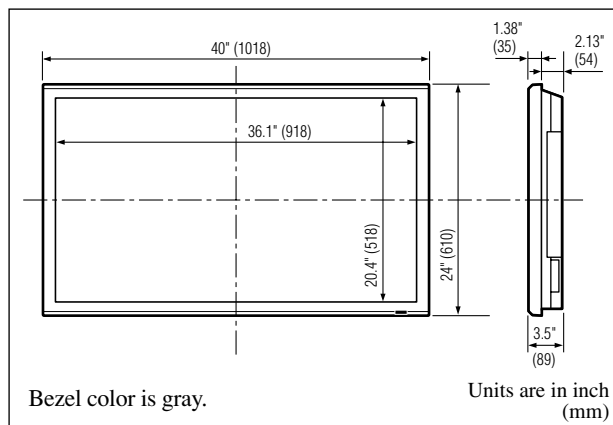Fermez doucement le couvercle jusqu'à ce que les crans se clipsent.

Fixer le tore en ferrite (fourni) au câble DVI à l'aide d'un collier.

Câble DVI (non fourni)   Connecteur
          Collier   Collier

          noyau (petit)   noyau (petit)

Câble d'alimentation
électrique (fourni)   noyau (grande)

          noyau (grande)

4

Specifications

Screen Size	36.1"(H)×20.4"(V) inches 918(H)×518(V) mm diagonal 42"
Aspect Ratio	16 : 9
Resolution	1024(H)×768(V) pixels
Pixel Pitch	0.036"(H)×0.027"(V) inches 0.897(H)×0.675(V) mm
Color Processing	4,096 steps, 68.7 billion colors

Signals

Synchronization Range	Horizontal : 15.5 to 110 kHz (automatic : step scan) Vertical : 50.0 to 120.0 Hz (automatic : step scan)
Input Signals	RGB, NTSC (3.58/4.43), PAL (B,G,M,N), PAL60, SECAM, HD*[1], DVD*[1], DTV*[1]

Input Terminals (VIDEO1 and RGB1 can also be used as OUTPUT terminals)

RGB

Visual 1 (Analog)	mini D-sub 15-pin×1
Visual 2 (Analog)	BNC (R, G, B, H/CS, V)×1*[2]
Visual 3 (Digital)	DVI-D 24-pin×1*[3]

Video

Visual 1	BNC×1*[2]
Visual 2	RCA-pin×1
Visual 3	S-Video: DIN 4-pin×1

DVD/HD/DTV

Visual 1	RCA-pin (Y, PB[CB], PR[CR])×1*[1]
Visual 2	BNC (Y, PB[CB], PR[CR])×1*[1], *[2]
Visual 3	DVI-D 24-pin×1*[3]

Audio	Stereo RCA×3(Selectable)
External Control	D-sub 9-pin×1(RS-232C)
Sound output	8W+8W at 6 ohm
Power Supply	AC100-240V 50/60Hz
Current Rating	5.2A (maximum)
Power Consumption	305W (typical)
Dimensions	40 (W)×24 (H)×3.5 (D) inches 1018 (W)×610 (H)×89(D) mm
Weight	65.0 lbs / 29.5 kg (without stand)

Environmental Considerations

Operating	Temperature	0°C to 40°C / 32°F to 104°F
	Humidity	20 to 80% (no condensation)
	Altitude	0 to 9180 feet / 0 to 2800 m
Storage	Temperature	-10°C to 50°C / 14°F to 122°F
	Humidity	10 to 90% (no condensation)
	Altitude	0 to 9840 feet / 0 to 3000 m

Front Panel User Controls	Power on/off, Input source select, Volume up/down, OSM control
Remote Control Functions	Power on/off, Input source select, OSM control, Volume up/down, Cursor (UP, DOWN,LEFT, RIGHT), Pointer, Zoom up/down, Off timer, Wireless/ Wired remote control
OSM Functions	Picture (Contrast/Brightness/Sharpness/ Color/Tint/ Picture mode/Noise reduction/Color temperature/ White balance/Gamma/Low tone/Color tune), Audio (Bass/Treble/Balance/Audio input), Image Adjust (Aspect mode/V-Position /H-Position/V-Height /H-Width/Auto Picture/Fine picture/Picture adjustment), Option1 (OSM/BNC Input/D-Sub Input/RGB Select/HD Select/Input Skip/All Reset), Option2 (Power management/Cinema mode/Long life [PLE, Orbiter, Inverse, White, Screen wiper, Soft focus]/Gray level/S1/S2/DVI Set up/CloseCaption/ Caption cont), Option3 (Timer/Power on mode/ Control lock/IR Remote/Loop out/ID number/Video wall [Divider, Position, Disp. mode, Auto ID, Image adjust, Power on delay, PLE link, Timer]), Advanced OSM, Language*, Color system, Source information *English, German, French, Italian, Spanish, Swedish, Chinese, Russian

Bezel color is gray.

Units are in inch (mm)

The features and specifications may be subject to change without notice.

*[1] HD/DVD/DTV input signals supported on this system

480P (60 Hz)	480I (60 Hz)	525P (60 Hz)
525I (60 Hz)	576P (50 Hz)	576I (50 Hz)
625P (50 Hz)	625I (50 Hz)	720P (60 Hz)
1035I (60 Hz)	1080I (50 Hz)	1080I (60 Hz)

*[2] The 5-BNC connectors are used as RGB/PC2 and HD/DVD2 input. Select one of them under "BNC INPUT".

*[3] Compatible with HDCP.

Supported Signals
- 640×480P @ 59.94/60Hz
- 1920×1080I @ 50Hz
- 1280×720P @ 59.94/60Hz
- 720×576P @ 50Hz
- 1920×1080I @ 59.94/60Hz
- 1440 (720)×576P @ 50Hz
- 720×480P @ 59.94/60Hz
- 1440 (720)×480I @ 59.94/60Hz

Note: In some cases a signal on the plasma monitor may not be displayed properly. The problem may be an inconsistency with standards from the source equipment (DVD, Set-top box, etc...). If you do experience such a problem please contact NEC Solutions (America), Inc. and also the manufacturer of the source equipment.

Other Features	Motion compensated 3D Scan Converter (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-3 pull down Converter (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function (100-900% Selectable), Video Wall 4-25 multi screen, Self Diagnosis, Image Burn reduction tools (PLE LOCK1~3, INVERSE, WHITE, ORBITER (Auto1,2/Manual), SCREEN WIPER), Color Temperature select (high/mid/mid low/low, user has 4 memories), Control lock (Except power SW), Auto Picture, Input Skip, Color Tune, Low Tone (3 mode), Auto ID, Programmable Timer, Gamma Correction (4 mode), Loop through interface, Plug and play (DDC1, DDC2b, RGB3: DDC2b only)
Accessories	Remote control with two AAA batteries, Power cord, Manuals, Safety metal fittings, Ferrite cores, Bands, Cable clamps
Regulations	UL Approved (UL 60950-1, CAN/CSA C22.2 No.60950-1) DOC Canada requirements Meets FCC Class A requirements

Table of Signals Supported

Supported resolution

- When the screen mode is NORMAL, each signal is converted to a 768 dots × 768 lines signal. (Except for *2, *4)
- When the screen mode is FULL, each signal is converted to a 1024 dots × 768 lines signal.

Computer input signals supported by this system

Model / Signal Type	Dots × lines	Vertical frequency (Hz)	Horizontal frequency (kHz)	Sync Polarity Horizontal	Sync Polarity Vertical	Presence Horizontal	Presence Vertical	Screen mode NORMAL (4:3)	Screen mode FULL (16:9)	RGB select*5	DVI	Memory
IBM PC/AT*8 compatible computers	640×400	70.1	31.5	NEG	NEG	YES	YES	YES*2	YES	––	NO	4
	640×480	59.9	31.5	NEG	NEG	YES	YES	YES	YES	STILL	YES	5
		72.8	37.9	NEG	NEG	YES	YES	YES	YES	––	YES	7
		75.0	37.5	NEG	NEG	YES	YES	YES	YES	STILL	YES	8
		85.0	43.3	NEG	NEG	YES	YES	YES	YES	––	YES	9
		100.4	51.1	NEG	NEG	YES	YES	YES	YES	––	YES	41
		120.4	61.3	NEG	NEG	YES	YES	YES	YES	––	YES	42
	848×480	60.0	31.0	POS	POS	YES	YES	––	YES	WIDE2	YES	19
	852×480*1	60.0	31.7	NEG	NEG	YES	YES	––	YES	WIDE1	YES	17
	800×600	56.3	35.2	POS	POS	YES	YES	YES	YES	STILL	YES	11
		60.3	37.9	POS	POS	YES	YES	YES	YES	STILL	YES	12
		72.2	48.1	POS	POS	YES	YES	YES	YES	––	YES	13
		75.0	46.9	POS	POS	YES	YES	YES	YES	––	YES	14
		85.1	53.7	POS	POS	YES	YES	YES	YES	––	YES	15
		99.8	63.0	POS	POS	YES	YES	YES	YES	––	YES	43
		120.0	75.7	POS	POS	YES	YES	YES	YES	––	YES	44
	1024×768	60.0	48.4	NEG	NEG	YES	YES	YES	YES*3	STILL	YES	24
		70.1	56.5	NEG	NEG	YES	YES	YES	YES*3	––	YES	25
		75.0	60.0	POS	POS	YES	YES	YES	YES*3	STILL	YES	26
		85.0	68.7	POS	POS	YES	YES	YES	YES*3	––	YES	27
		100.6	80.5	NEG	NEG	YES	YES	YES	YES*3	––	YES	45
	1152×864	75.0	67.5	POS	POS	YES	YES	YES	YES	STILL	YES	51
	1280×768	56.2	45.1	POS	POS	YES	YES	––	YES	WIDE1	NO	52
		59.8	48.0	POS	NEG	YES	YES	––	YES	WIDE3	YES	80
	1280×768*9	69.8	56.0	NEG	POS	YES	YES	––	YES	WIDE1	YES	66
	1280×800*9	60.0	49.7	NEG	NEG	YES	YES	––	YES	WIDE1	YES	21
	1280×854*9	60.0	53.1	NEG	NEG	YES	YES	––	YES	WIDE2	YES	37
	1360×765	60.0	47.7	POS	POS	YES	YES	––	YES	WIDE1	NO	22
	1360×768	60.0	47.7	POS	POS	YES	YES	––	YES	WIDE1	YES	22
	1376×768	59.9	48.3	NEG	POS	YES	YES	––	YES	WIDE2	YES	53
	1280×1024	60.0	64.0	POS	POS	YES	YES	YES*4	YES	STILL	YES	29
		75.0	80.0	POS	POS	YES	YES	YES*4	YES	––	YES	30
		85.0	91.1	POS	POS	YES	YES	YES*4	YES	––	YES	40
		100.1	108.5	POS	POS	YES	YES	YES*4	YES	––	NO	47
	1680×1050*9	60.0	65.3	NEG	NEG	YES	YES	––	YES	WIDE4	YES	38
	1600×1200	60.0	75.0	POS	POS	YES	YES	YES	YES	––	YES	54
		65.0	81.3	POS	POS	YES	YES	YES	YES	––	NO	55
		70.0	87.5	POS	POS	YES	YES	YES	YES	––	NO	56
		75.0	93.8	POS	POS	YES	YES	YES	YES	––	NO	57
		85.0	106.3	POS	POS	YES	YES	––	YES	––	NO	58
	1920×1200*9	60.0	74.6	NEG	NEG	YES	YES	––	YES	WIDE2	––	81
	1920×1200RB*9	60.0	74.0	NEG	NEG	YES	YES	––	YES	WIDE3	YES	88
Apple Macintosh*6 *8	640×480	66.7	35.0	Sync on G	Sync on G	––	––	YES	YES	––	NO	6
	832×624	74.6	49.7	Sync on G	Sync on G	––	––	YES	YES	––	NO	16
	1024×768	74.9	60.2	Sync on G	Sync on G	––	––	YES	YES*3	WIDE1	NO	28
	1152×870	75.1	68.7	Sync on G	Sync on G	––	––	YES	YES	WIDE1	NO	39
	1440×900*9	60.0	56.0	NEG	NEG	YES	YES	––	YES	––	YES	89
Work Station (EWS4800)*8	1280×1024	60.0	64.6	NEG	NEG	YES	YES	YES*4	YES	––	YES	29
		71.2	75.1	NEG	NEG	YES	YES	YES*4	YES	––	YES	48
Work Station (HP)*8	1280×1024	72.0	78.1	––	––	––	––	YES*4	YES	––	YES	59
Work Station (SUN)*8	1152×900	66.0	61.8	C Sync	C Sync	––	––	YES	YES	––	YES	60
		76.0	71.7	C Sync	C Sync	––	––	YES	YES	––	YES	61
	1280×1024	76.1	81.1	C Sync	C Sync	––	––	YES*4	YES	––	YES	30
Work Station (SGI)	1024×768	60.0	49.7	––	––	––	––	YES	YES*3	––	YES	62
	1280×1024	60.0	63.9	––	––	––	––	YES*4	YES	––	YES	29
IDC-3000G												
PAL625P	768×576	50.0	31.4	NEG	NEG	YES	YES	YES*7	YES*7	––	NO	31
NTSC525P	640×480	59.9	31.5	NEG	NEG	YES	YES	YES*7	YES*7	MOTION	NO	32

*1 Only when using a graphic accelerator board that is capable of displaying 852×480.
*2 Display only 640 lines with the screen center of the vertical orientation located at the center.
*3 The picture is displayed in the original resolution. The picture will be compressed for other signals.
*4 Aspect ratio is 5:4. This signal is converted to a 720 dots×768 lines signal.
*5 Normally the RGB select mode suite for the input signals is set automatically. If the picture is not displayed properly, set the RGB mode
     prepared for the input signals listed in the table above.
*6 To connect the monitor to Macintosh computer, use the monitor adapter (D-Sub 15-pin) to your computer's video port.
*7 Other screen modes (ZOOM and STADIUM) are available as well.
*8 When viewing a moving picture at a vertical frequency greater than 65Hz, the picture may sometimes be unstable (jumpy). If this occurs,
     please set the refresh rate of the external equipment to 60Hz.
     To view 480I@60Hz (480 interlaced lines, 60Hz refresh rate) or 576I@50Hz (567 interlaced lines, 50Hz refresh rate) when sync polarity
     is "Sync on Green", set "RGB SELECT" to "MOTION".
*9 CVT standard compliant.

NOTE:
- *While the input signals comply with the resolution listed in the table above, you may have to adjust the position and size of the picture or the fine picture because of errors in synchronization of your computer.*
- *This monitor has a resolution of 1024 dots×768 lines. It is recommended that the input signal should be XGA, wide XGA, or equivalent.*
- *With digital input some signals are not accepted.*
- *The sync may be disturbed when a nonstandard signal other than the aforementioned is input.*
- *If you are connecting a composite sync signal, use the HD terminal.*

What is HDCP/HDCP technology?
HDCP is an acronym for High-bandwidth Digital Content Protection. High bandwidth Digital Content Protection (HDCP) is a system for preventing illegal copying of video data sent over a Digital Visual Interface (DVI).
If you are unable to view material via the DVI input, this does not necessarily mean the PDP is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community (Digital Content Protection, LLC).

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Printed in Japan
7S801341